

Title (en)
COMPOSITE TEXTILE MATERIAL AND ARTICLE OF PROTECTION FOR NRBC APPLICATIONS

Title (de)
VERBUNDTEXTILMATERIAL UND SCHUTZARTIKEL FÜR NRBC-ANWENDUNGEN

Title (fr)
MATERIAU TEXTILE COMPOSITE ET ARTICLE DE PROTECTION POUR APPLICATIONS NRBC

Publication
EP 2026884 B1 20160309 (FR)

Application
EP 06841963 A 20061215

Priority
• FR 2006002760 W 20061215
• FR 0512911 A 20051219

Abstract (en)
[origin: WO2007071835A2] The invention proposes a composite textile material for NRBC applications, comprising a first material capable of providing a physical barrier to the penetration of microorganisms and a second material capable of trapping, by absorption and/or adsorption, said microorganisms stopped by said first material and article of protection made of said material.

IPC 8 full level
A62D 5/00 (2006.01)

CPC (source: EP US)
A62B 17/006 (2013.01 - EP US); **A62D 5/00** (2013.01 - EP US); **B32B 5/022** (2013.01 - EP US); **B32B 5/18** (2013.01 - EP US); **B32B 5/245** (2013.01 - EP US); **B32B 5/26** (2013.01 - EP US); **D04H 3/02** (2013.01 - EP US); **D04H 13/00** (2013.01 - EP US); **D06M 16/00** (2013.01 - EP US); **D06M 17/00** (2013.01 - EP US); **A41D 31/305** (2019.01 - EP US); **A62D 2101/22** (2013.01 - EP US); **B32B 2262/0253** (2013.01 - EP US); **B32B 2262/0276** (2013.01 - EP US); **B32B 2262/106** (2013.01 - EP US); **B32B 2264/102** (2013.01 - EP US); **B32B 2264/108** (2013.01 - EP US); **B32B 2307/7145** (2013.01 - EP US); **B32B 2307/724** (2013.01 - EP US); **B32B 2307/7265** (2013.01 - EP US); **Y10T 442/197** (2015.04 - EP US); **Y10T 442/2525** (2015.04 - EP US); **Y10T 442/60** (2015.04 - EP US); **Y10T 442/647** (2015.04 - EP US); **Y10T 442/674** (2015.04 - EP US); **Y10T 442/675** (2015.04 - EP US); **Y10T 442/68** (2015.04 - EP US)

Citation (opposition)
Opponent : Blücher GmbH
• FR 2678172 A1 19921231 - BOYE MANUFACTURE VETEMENTS PAU [FR]
• US 2001018095 A1 20010830 - SHLENKER ROBIN RENEE THILL [US], et al
• US 2005042400 A1 20050224 - CERBINI STEFANO [IT], et al
• EP 1092471 A1 20010418 - EUROCHEM SA [FR]
• US 5277963 A 19940111 - VON BLUCHER HASSO [DE], et al
• US 5334436 A 19940802 - HOBBS KARIN [DE], et al
• FR 2656459 A1 19910628 - BOYE SA MANUF VETEMENTS PAUL [FR], et al
• DE 69018410 T2 19950803 - BOYE PAUL VETEMENTS [FR], et al
• FR 2799387 A1 20010413 - EUROCHEM [FR]
• US 6464887 B1 20021015 - DE LA BRUNIERE PATRICK [FR]
• US 5731065 A 19980324 - STELZMUELLER HELMUT [DE], et al
• FR 2678172 A1 19921231 - BOYE MANUFACTURE VETEMENTS PAU [FR]
• EP 0562264 B1 19970507 - WANZL ENTWICKLUNG GMBH [DE]
• DE 69207986 T2 19960919 - BOYE PAUL VETEMENTS [FR]
• DE 20319676 U1 20050113 - BLUECHER GMBH [DE]
• US 2007134483 A1 20070614 - BOEHRINGER BERTRAM [DE], et al
• DE 10356776 A1 20050707 - BLUECHER GMBH [DE]
• US 2005079379 A1 20050414 - WADSWORTH LARRY C [US], et al
• US 2005191918 A1 20050901 - LANGLEY JOHN D [US], et al
• US 2009093178 A1 20090409 - BOYE JACQUES [FR]
• DE 3210070 A1 19821118 - TOYO BOSEKI [JP]
• WO 9637365 A1 19961128 - AKZO NOBEL NV [NL], et al
• DE 20318173 U1 20041125 - BLUECHER GMBH [DE]
• DE 10318053 A1 20050203 - BLUECHER GMBH [DE]
• DE 20317080 U1 20041202 - BLUECHER GMBH [DE]
• DE 1619297 A1 19710715 - DELET
• DE 4310110 A1 19940113 - KAERCHER GMBH & CO ALFRED [DE]
• US 5024594 A 19910618 - ATHAYDE AMULYA L [US], et al
• DE 10240548 A1 20040318 - BLUECHER GMBH [DE]
• DE 10360845 A1 20050721 - COROVIN GMBH [DE]
• WO 2004037026 A1 20040506 - HARTMANN PAUL AG [DE], et al
• EP 1433394 A1 20040630 - DONALDSON CO INC [US]
• US 2004116025 A1 20040617 - GOGINS MARK A [US], et al
• JP 2005246162 A 20050915 - TOYO BOSEKI
• US 5609947 A 19970311 - KAMEI TOSHIKAZU [JP], et al
• "Vliesstoff", WIKIPEDIA, DER FREIEN ENZYKLOPÄDIE, 7 December 2016 (2016-12-07), pages 1 - 22, XP055333644, Retrieved from the Internet <URL:https://de.wikipedia.org/wiki/Vliesstoff>
• ANONYMOUS: "Uniguard: Wide Range of Ophthalmic Surgical Drapes from OMS®", OMS, 26 June 2015 (2015-06-26), XP055333638
• ANONYMOUS: "Nylon", WIKIPEDIA, THE FREE ENCYCLOPEDIA, 30 November 2016 (2016-11-30), pages 1 - 8, XP055333640, Retrieved from the Internet <URL:https://en.wikipedia.org/wiki/Nylon>
• ANONYM: "Aktivkohle", WIKIPEDIA, DER FREIEN ENZYKLOPÄDIE, 24 November 2016 (2016-11-24), XP055333650, Retrieved from the Internet <URL:https://de.wikipedia.org/wiki/Aktivkohle>
• ANONYM: "Aktivkohle", PHARMAWIKI, XP055334034, Retrieved from the Internet <URL:http://www.pharmawiki.ch/wiki/index.php?wiki=Aktivkohle>
Opponent : Blücher GmbH (DE)
• FR 2678172 A1 19921231 - BOYE MANUFACTURE VETEMENTS PAU [FR]

- US 2001018095 A1 20010830 - SHLENKER ROBIN RENEE THILL [US], et al
- US 2005042400 A1 20050224 - CERBINI STEFANO [IT], et al
- EP 1092471 A1 20010418 - EUROCHEM SA [FR]
- US 5277963 A 19940111 - VON BLUCHER HASSO [DE], et al
- US 5334436 A 19940802 - HOBBS KARIN [DE], et al
- FR 2656459 A1 19910628 - BOYE SA MANUF VETEMENTS PAUL [FR], et al
- DE 69018410 T2 19950803 - BOYE PAUL VETEMENTS [FR], et al
- FR 2799387 A1 20010413 - EUROCHEM [FR]
- US 6464887 B1 20021015 - DE LA BRUNIERE PATRICK [FR]
- US 5731065 A 19980324 - STELZMUELLER HELMUT [DE], et al
- FR 2678172 A1 19921231 - BOYE MANUFACTURE VETEMENTS PAU [FR]
- EP 0562264 B1 19970507 - WANZL ENTWICKLUNG GMBH [DE]
- DE 69207986 T2 19960919 - BOYE PAUL VETEMENTS [FR]
- DE 20319676 U1 20050113 - BLUECHER GMBH [DE]
- US 2007134483 A1 20070614 - BOEHRINGER BERTRAM [DE], et al
- DE 10356776 A1 20050707 - BLUECHER GMBH [DE]
- US 2005079379 A1 20050414 - WADSWORTH LARRY C [US], et al
- US 2005191918 A1 20050901 - LANGLEY JOHN D [US], et al
- US 2009093178 A1 20090409 - BOYE JACQUES [FR]
- DE 3210070 A1 19821118 - TOYO BOSEKI [JP]
- WO 9637365 A1 19961128 - AKZO NOBEL NV [NL], et al
- DE 20318173 U1 20041125 - BLUECHER GMBH [DE]
- DE 10318053 A1 20050203 - BLUECHER GMBH [DE]
- DE 20317080 U1 20041202 - BLUECHER GMBH [DE]
- DE 1619297 A1 19710715 - DELET
- DE 4310110 A1 19940113 - KAERCHER GMBH & CO ALFRED [DE]
- US 5024594 A 19910618 - ATHAYDE AMULYA L [US], et al
- DE 10240548 A1 20040318 - BLUECHER GMBH [DE]
- DE 10360845 A1 20050721 - COROVIN GMBH [DE]
- WO 2004037026 A1 20040506 - HARTMANN PAUL AG [DE], et al
- EP 1433394 A1 20040630 - DONALDSON CO INC [US]
- US 2004116025 A1 20040617 - GOGINS MARK A [US], et al
- JP 2005246162 A 20050915 - TOYO BOSEKI
- US 5609947 A 19970311 - KAMEI TOSHIKAZU [JP], et al
- "Vliesstoff", WIKIPEDIA, DER FREIEN ENZYKLOPADIE, 9 July 2016 (2016-07-09), pages 1 - 22, XP055333644, Retrieved from the Internet <URL:https://de.wikipedia.org/wiki/Vliesstoff>
- "Uniguard: Wide Range of Ophthalmic Surgical Drapes from OMS", OMS, 26 June 2015 (2015-06-26), XP055333638, Retrieved from the Internet <URL:http://www.oms-india.com/drapes.pdf>
- ISO: "Textilien-Bestimmung der Luftdurchlässigkeit von textilen Flächengebilden", DIN EN ISO 9237:1995-12, December 1995 (1995-12-01), XP055334021
- "Textilien - Physiologische Wirkung - Messung des Wärme- und Wasserdampfdurchgangswiderstands unter stationären Bedingungen (sweating guarded-hotplate Test)", DIN EN ISO 11092 2014-12, December 2004 (2004-12-01), XP055334030
- ISO: "Wärmewiderstandsverhalten (Thermal Resistance) sowie zum Wasserdampf Widerstand (Water-Vapour Resistance)", ISO (INTERNATIONAL ORGANISATION FOR STANDARDIZATION), 2014, XP055334041
- "Nylon", WIKIPEDIA, THE FREE ENCYCLOPEDIA, 29 November 2016 (2016-11-29), pages 1 - 8, XP055333640, Retrieved from the Internet <URL:https://en.wikipedia.org/wiki/Nylon>
- "Aktivkohle", WIKIPEDIA, DER FREIEN ENZYKLOPÄDIE, 24 November 2016 (2016-11-24), pages 1 - 7, XP055333650, Retrieved from the Internet <URL:https://de.wikipedia.org/wiki/Aktivkohle>
- "Aktivkohle", PHARMAWIKI, 21 September 2016 (2016-09-21), XP055334034, Retrieved from the Internet <URL:http://www.pharmawiki.ch/wiki/index.php?wiki=Aktivkohle>

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2894834 A1 20070622; FR 2894834 B1 20080829; CA 2633560 A1 20070628; CA 2633560 C 20140722; EP 2026884 A2 20090225; EP 2026884 B1 20160309; US 2009093178 A1 20090409; US 9126064 B2 20150908; WO 2007071835 A2 20070628; WO 2007071835 A3 20070809

DOCDB simple family (application)

FR 0512911 A 20051219; CA 2633560 A 20061215; EP 06841963 A 20061215; FR 2006002760 W 20061215; US 15805506 A 20061215